



Bighead carp growers in Laguna de Bay (CLOCKWISE). Messrs. Puzon, Reyes and Atty. Tocon have high hopes for the developing bighead carp industry in Laguna de Bay. They agree that bighead carp culture is easier than raising milkfish or tilapia, a demand for the fish is growing, and affordable fish, especially for the poorer sector of society is provided by bighead carp

Laguna de Bay and the LLDA

Laguna de Bay is a primary source of livelihood of many fishers. It is the largest freshwater lake in the Philippines, with a surface area of 90,000 ha. For many years, it has been a source of livelihood for many fishers residing in the coastal municipalities surrounding the lake. Commercial fishpens have also been installed in the lake, mostly raising milkfish and tilapia.

Bighead carp, aside from being raised in fish pens in commercial quantity, was one among 13 species caught by open fishing in 1996-1997. Other fishes included *kanduli*, *biya*, *ayungin*, *tilapia*, *milkfish*, *karpa*, *hipon*, *dalag*, *hito*, *gourami*, *martiniko*, and *dulong*. Of the total catch of 2,668 metric tons, bighead carp accounted for 8.6% or 228 metric tons.

In recent years however, key issues and concerns of fishers in the lake have arisen from the two major projects that the Laguna Lake Development Authority (LLDA) of the Philippine Department of Environment and Natural Resources (DENR) is currently undertak-

ing: a pollution charging system and use of the lake as a source of domestic water supply.

LLDA is tasked to lead, promote and accelerate the development and balanced growth of the lake. It carries out the development of the basin with due regard for environmental management and control, preservation of the quality of human life and ecological systems, and the prevention of undue ecological disturbances, deterioration, and pollution.

Aquaculture and open fishery are seen to conflict with each other with respect to lake occupancy. In 1983, aquaculture reached its peak with approximately one third of the lake occupied by fishpens. As a result, small fishers found themselves almost displaced from their main occupation. In 1986, the total fishpen area was regulated and reduced from 30,000 ha to the present 6,133 ha. However, the fishers view the lake as an open resource.

In open fishing, the increase in population of fishers and their activities have resulted in declining fish catch. Continued intensive gathering of snails for the duck industry by dredging or trawling operations (about

2 tons per year of snails are gathered) causes destruction of benthos and rooted plants. This has resulted in increased lake turbidity. Proliferation of fishpens had likewise contributed to a reduction in snail production. This has greatly affected the once thriving local duck raising industry.

Current LLDA records, however, show that Laguna de Bay's fishpen area had declined. From a total of 15,052 ha in 1989, today 10 years later, this number has gone down to 6,133 ha.

The opportunities and potentials of the fishing industry have resulted in the industry's dominant use of the lake. As such, the resource is viewed by some sectors as primarily for fishery and that the entry of saline water into the lake from Manila Bay is very relevant to fishery production. This is seen as running counter to the lake water resources multiple-use policy that the LLDA is trying to promote. But through this policy, the LLDA is rationalizing the use of Laguna de Bay so that "mutually beneficial co-existence and cooperation shall be the mark of the relationship between and among various lake stakeholders." -- ASF